



Linux Ubuntu 26.04 Manual Pages on command 'signbit.3'

\$ man signbit.3

signbit(3) Library Functions Manual signbit(3)

NAME

signbit - test sign of a real floating-point number

LIBRARY

Math library (libm, -lm)

SYNOPSIS

```
#include <math.h>
```

```
int signbit(x);
```

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

```
signbit():
```

```
    _ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

DESCRIPTION

signbit() is a generic macro which can work on all real floating-point types. It returns a nonzero value if the value of x has its sign bit set.

This is not the same as $x < 0.0$, because IEEE 754 floating point allows zero to be signed.

The comparison $-0.0 < 0.0$ is false, but signbit(-0.0) will return a nonzero value.

NaNs and infinities have a sign bit.

RETURN VALUE

The signbit() macro returns nonzero if the sign of x is negative; otherwise, it returns zero.

ERRORS

No errors occur.

ATTRIBUTES

For an explanation of the terms used in this section, see attributes(7).

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? Interface ? Attribute ? Value ?

??

? signbit() ? Thread safety ? MT-Safe ?

??

STANDARDS

C11, POSIX.1-2008.

HISTORY

POSIX.1-2001, C99.

This function is defined in IEC 559 (and the appendix with recommended functions in IEEE 754/IEEE 854).

SEE ALSO

copysign(3)

Linux man-pages 6.17

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